

Amendment to the Claims:

The present response replies to an Office Action dated October 18, 2007. Claims 1-29 are currently pending in the present application. In the Office Action, the Examiner rejected claims 1-29 on various grounds. The Applicant responds to each ground of rejection as subsequently recited herein and requests reconsideration of the present application. The following listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claim 1 (original): A system for treating a vascular condition, comprising:
a catheter body;
an inflatable balloon disposed on the catheter body;
a plurality of concentrically disposed restrictors circumferentially disposed on the inflatable balloon, wherein one or more restrictors are at least partially removable to allow expansion of the inflatable balloon to a predetermined size; and
inflation means to inflate the inflatable balloon, the inflation means coupled to a proximal end of the catheter body.

Claim 2 (original): The system of claim 1 wherein the catheter body includes an inflation lumen and an inflation hole adjacent to the inflatable balloon, wherein the inflation lumen and the inflation hole allow inflation fluid from the inflation means to inflate the inflatable balloon.

Claim 3 (original): The system of claim 1 wherein the one or more restrictors are partially removable to allow expansion of the inflatable balloon to a predetermined balloon diameter.

Claim 4 (original): The system of claim 1 wherein the one or more restrictors are partially removable to control an expandable length of the inflatable balloon.

Claim 5 (original): The system of claim 1 wherein the one or more restrictors are frictionally coupled to the inflatable balloon.

Claim 6 (original): The system of claim 1 wherein each restrictor is attached to the catheter body at at least one point on an outside surface of the catheter body.

Claim 7 (original): The system of claim 1 further comprising:
a restrictor removal element attached to each restrictor.

Claim 8 (original): The system of claim 7 wherein the restrictor removal element and the restrictor are formed as a unitary member.

Claim 9 (original): The system of claim 7 wherein the restrictor removal element is selected from the group consisting of a tab, a flap, a string, a thread, and a wire.

Claim 10 (original): The system of claim 1 wherein the one or more restrictors comprise a material selected from the group consisting of polyurethane, silicone, a copolymer of polyurethane and silicone, natural rubber, synthetic rubber, a thermoplastic polyamide, nylon, latex, polyethylene, polyisoprene, polyisobutylene, polyethylene terephthalate, polyethylene, polytetrafluoroethylene, expanded polytetrafluoroethylene, an elastane, a thermoplastic elastomer, a woven polymeric fabric, an expandable polymeric sheet, an elastomeric material, a semi-compliant polymer, and a combination thereof.

Claim 11 (original): The system of claim 1 further comprising:
a stent including a stent framework operably coupled to the inflatable balloon, wherein the one or more restrictors are removable to allow expansion of the stent framework to a predetermined stent diameter.

Claim 12 (original): A method of treating a vascular condition, comprising:
providing a variable expansion balloon catheter including a plurality of concentrically disposed restrictors circumferentially disposed on an inflatable balloon;
selecting at least one of the restrictors based on a predetermined balloon size;
axially displacing the selected restrictors with respect to the inflatable balloon;
and

inflating the inflatable balloon to the predetermined balloon size based on the axial displacement of the selected restrictors.

Claim 13 (original): The method of claim 12 wherein axially displacing the selected restrictors comprises sliding the selected restrictors towards a proximal end of the variable expansion balloon catheter.

Claim 14 (original): The method of claim 12 wherein axially displacing the selected restrictors comprises removing the selected restrictors from the variable expansion balloon catheter.

Claim 15 (original): The method of claim 12 wherein axially displacing the selected restrictors comprises manually pulling at least one restrictor removal element attached to the selected restrictors.

Claim 16 (original): The method of claim 12 wherein inflating the inflatable balloon to the predetermined balloon size comprises allowing expansion of the inflatable balloon to a predetermined balloon diameter when the inflatable balloon is inflated.

Claim 17 (original): The method of claim 12 wherein inflating the inflatable balloon to the predetermined balloon size comprises controlling an expandable length of the inflatable balloon.

Claim 18 (original): The method of claim 12 further comprising:
expanding a stent including a stent framework, the stent framework operably coupled to the inflatable balloon; wherein the stent is expanded to a predetermined stent diameter based on the axial displacement of the selected restrictors.

Claim 19 (original): A balloon catheter, comprising:
a catheter body;
an inflatable balloon disposed on the catheter body; and

a plurality of concentrically disposed restrictors circumferentially disposed on the inflatable balloon, wherein one or more restrictors are axially translatable to allow expansion of the inflatable balloon to a predetermined size.

Claim 20 (original): The balloon catheter of claim 19 wherein the catheter body includes an inflation lumen and an inflation hole adjacent to the inflatable balloon, wherein the inflation lumen and the inflation hole allow inflation of the inflatable balloon when an inflation fluid is injected into the inflation lumen at a proximal end of the balloon catheter.

Claim 21 (original): The balloon catheter of claim 19 wherein the one or more restrictors are axially translatable to allow expansion of the inflatable balloon to a predetermined balloon diameter.

Claim 22 (original): The balloon catheter of claim 19 wherein the one or more restrictors are axially translatable to control an expandable length of the inflatable balloon.

Claim 23 (original): The balloon catheter of claim 19 wherein the one or more restrictors are frictionally coupled to the inflatable balloon.

Claim 24 (original): The balloon catheter of claim 19 wherein each restrictor is attached to the catheter body at least one point on an outside surface of the catheter body.

Claim 25 (original): The balloon catheter of claim 19 wherein the one or more restrictors comprise a material selected from the group consisting of polyurethane, silicone, a copolymer of polyurethane and silicone, natural rubber, synthetic rubber, a thermoplastic polyamide, nylon, latex, polyethylene, polyisoprene, polyisobutylene, polyethylene terephthalate, polyethylene, polytetrafluoroethylene, expanded polytetrafluoroethylene, an elastane, a thermoplastic elastomer, a woven polymeric fabric, an expandable polymeric sheet, an elastomeric material, a semi-compliant polymer, and a combination thereof.

Claim 26 (original): The balloon catheter of claim 19 further comprising:
a restrictor removal element attached to each restrictor.

Claim 27 (original): The balloon catheter of claim 26 wherein the restrictor removal element and the restrictor are formed as a unitary member.

Claim 28 (original): The balloon catheter of claim 26 wherein the restrictor removal element is selected from the group consisting of a tab, a flap, a string, a thread, and a wire.

Claim 29 (original): The balloon catheter of claim 19 further comprising:
a stent including a stent framework operably coupled to the inflatable balloon, wherein the one or more restrictors are removable to allow expansion of the stent framework to a predetermined stent diameter.